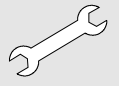


## Chapter 3.3

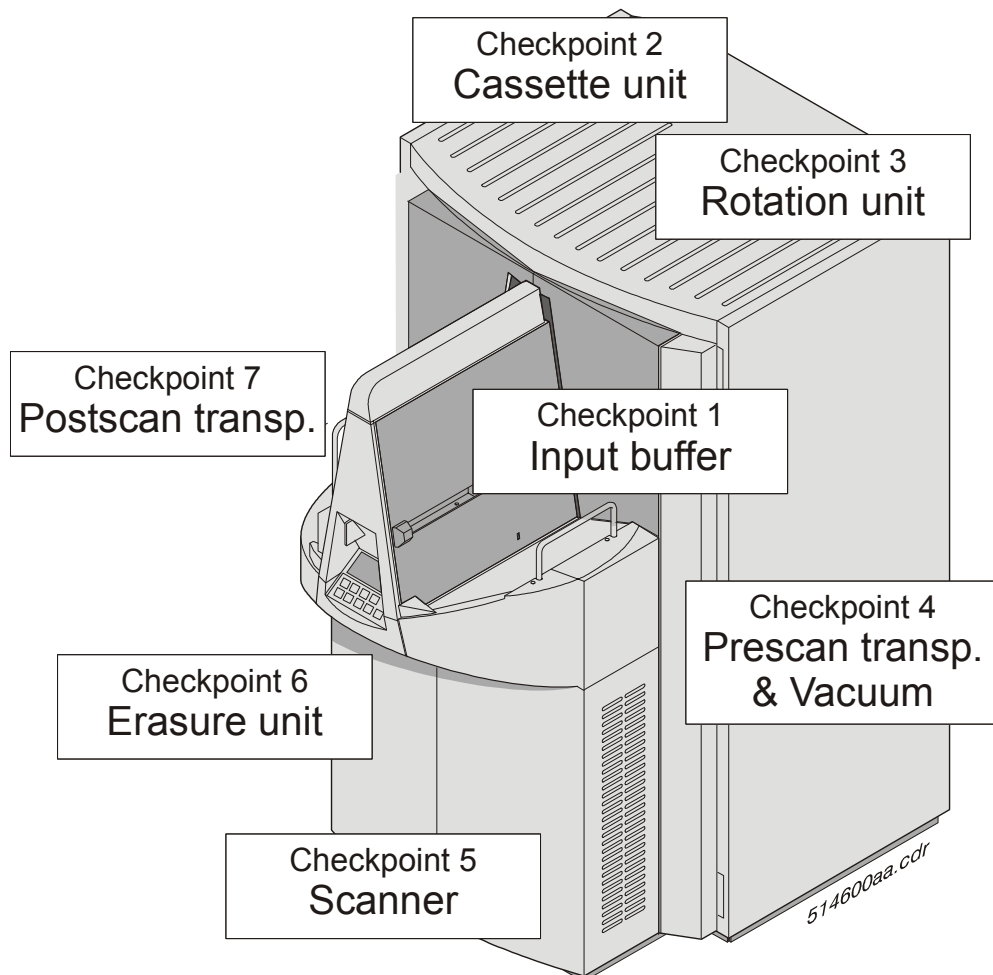
### List of Contents

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## 1

## Checkpoints for Troubleshooting



(1) Check info counters and select the defective module.

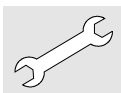
(2) Run test as indicated in the respective checkpoint:

The reports are checked by the Diagnostic Software for the selected module. The procedure is not visible on the display of the digitizer only results, problem descriptions and repair proposals are displayed.

If there is no result, check the adjustments of the module in chapter 3.6.



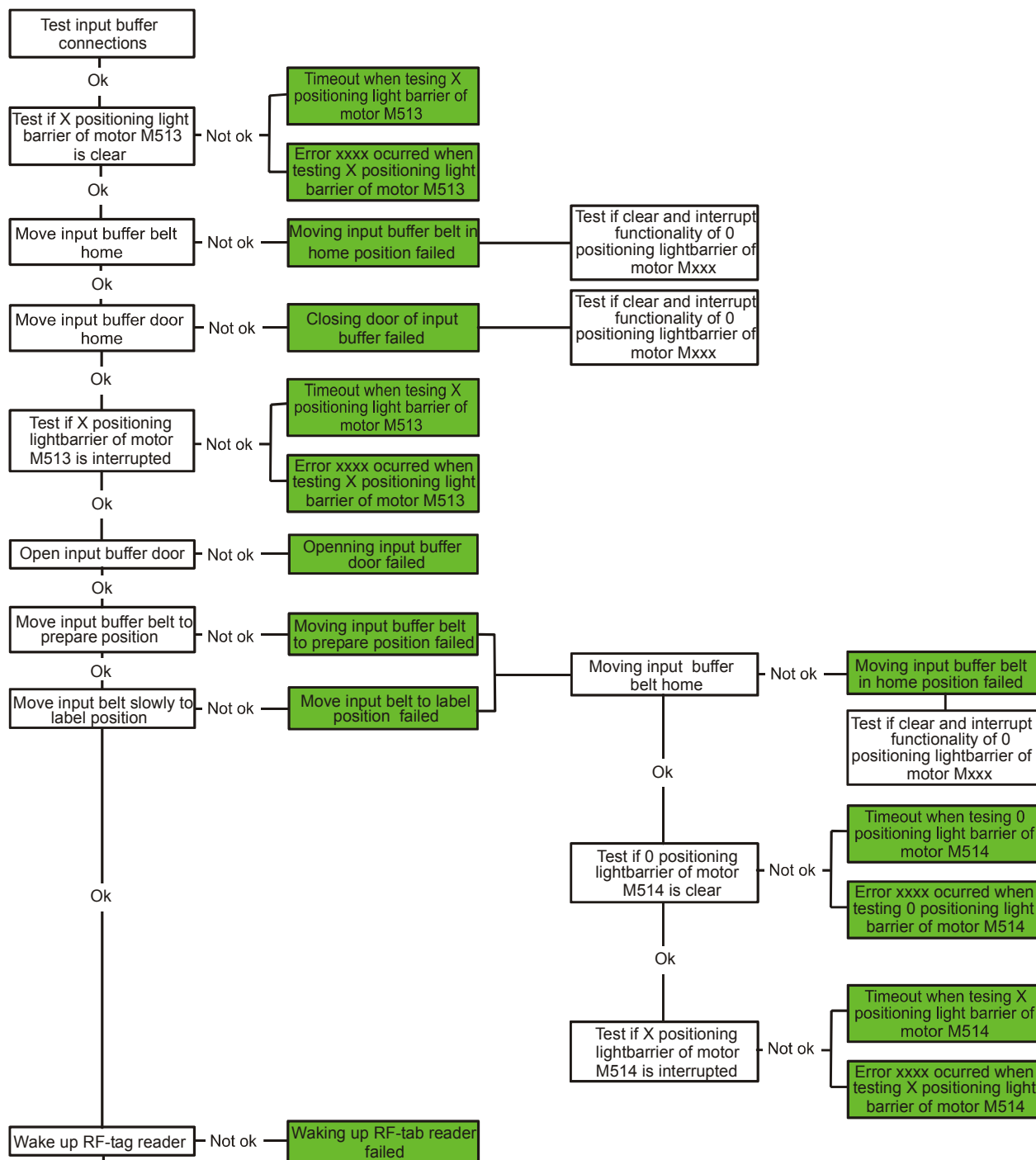
The error numbers of the internal reports are not identical to the error codes shown on the display.

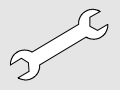


## 1.1 Input Buffer - Checkpoint 1

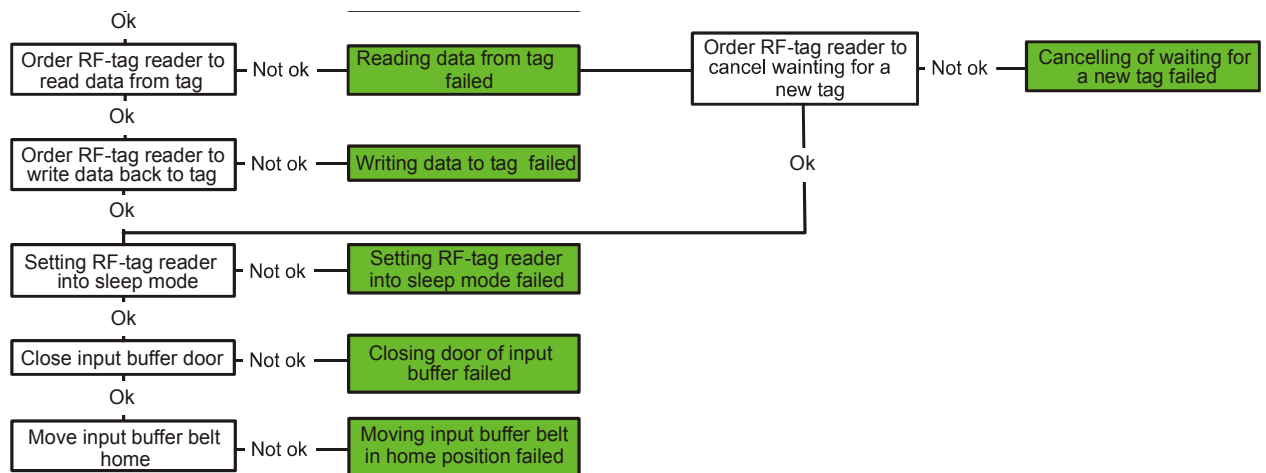
Run Diagnostic Software:

7 DIAGNOSTICS  
2 Mechanical Modules  
1 Input buffer & R/F Tag





continues Input Buffer – Checkpoint 1



## 1.2

### Cassette Unit - Checkpoint 2

Run Diagnostic Software:

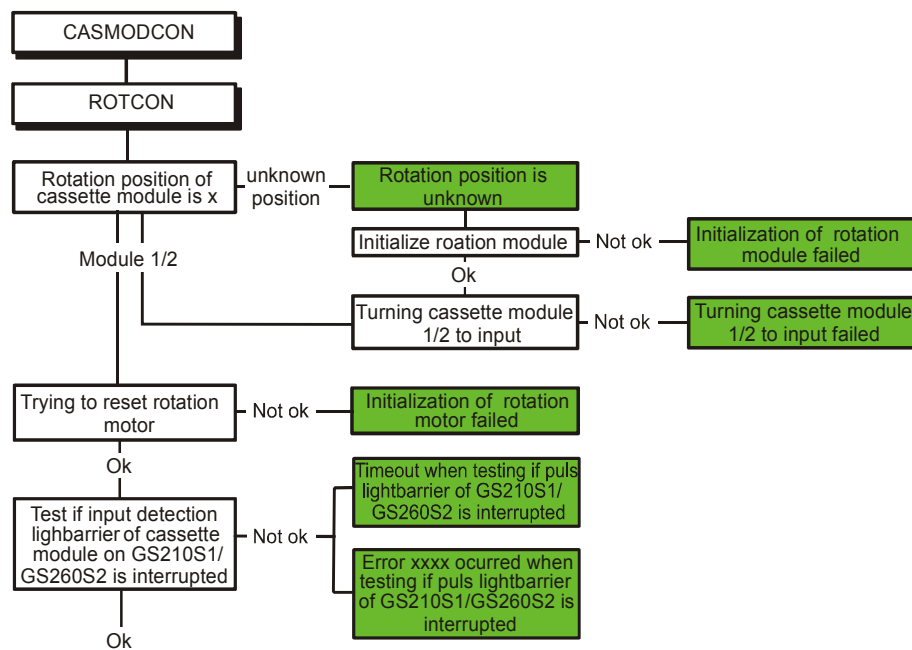
7 DIAGNOSTICS

2 Mechanical Modules

2 Cassette Module 1

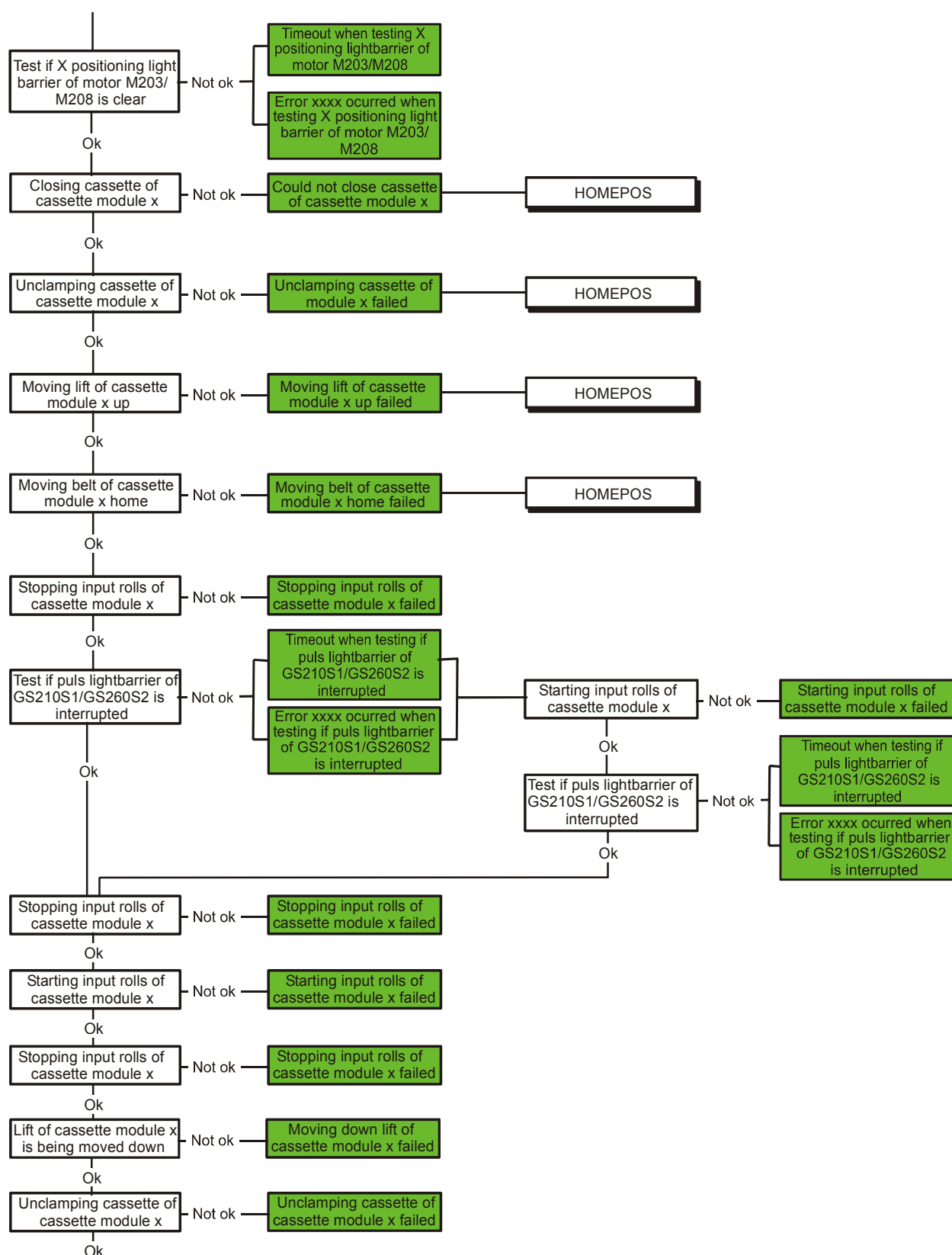
or 3 Cassette Module 2

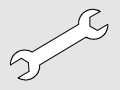
The abbreviations CASMODCON, ROTCON, HOMEPOS and XPOS are subprograms and are also checked during diagnose.



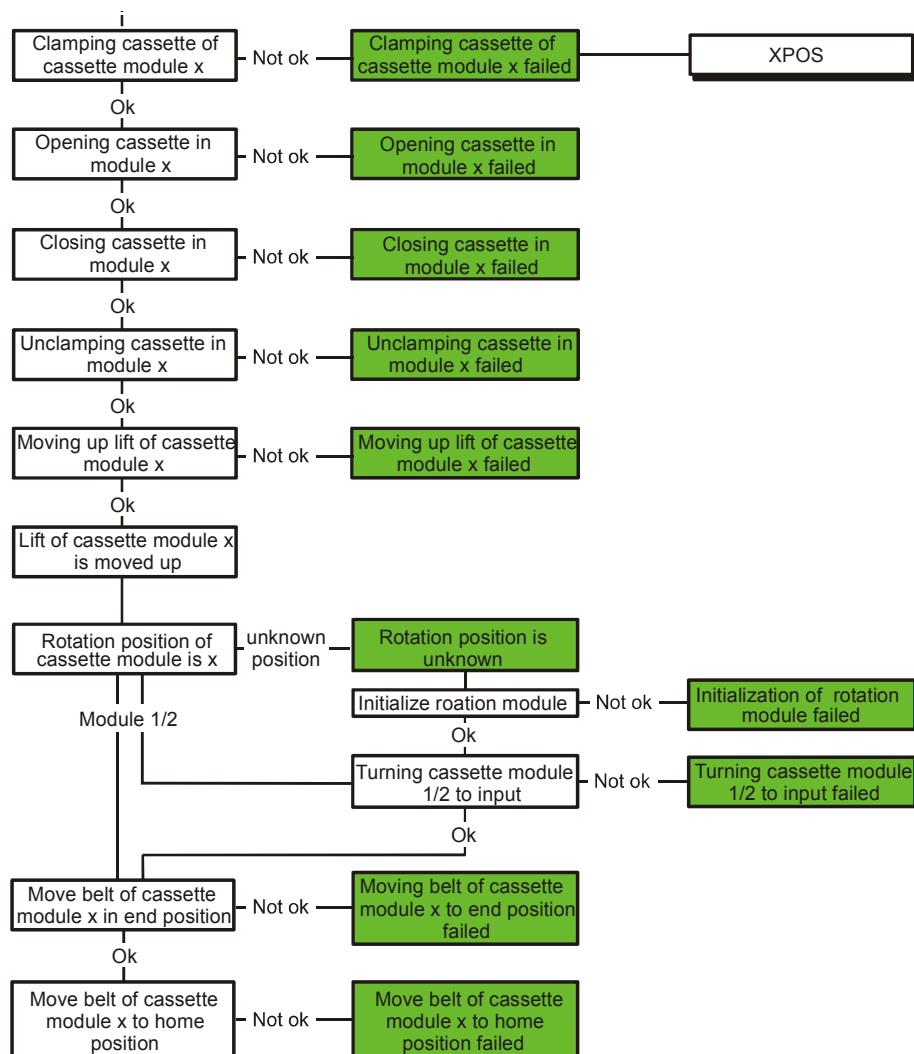


continues Cassette Unit – Checkpoint 2





## continues Cassette Unit – Checkpoint 2



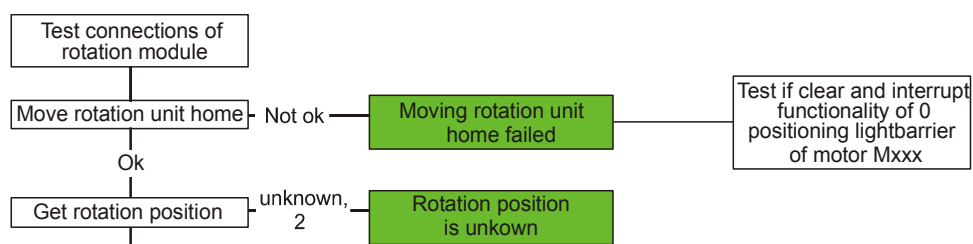
## 1.3

## Rotation Unit - Checkpoint 3

Run Diagnostic Software:

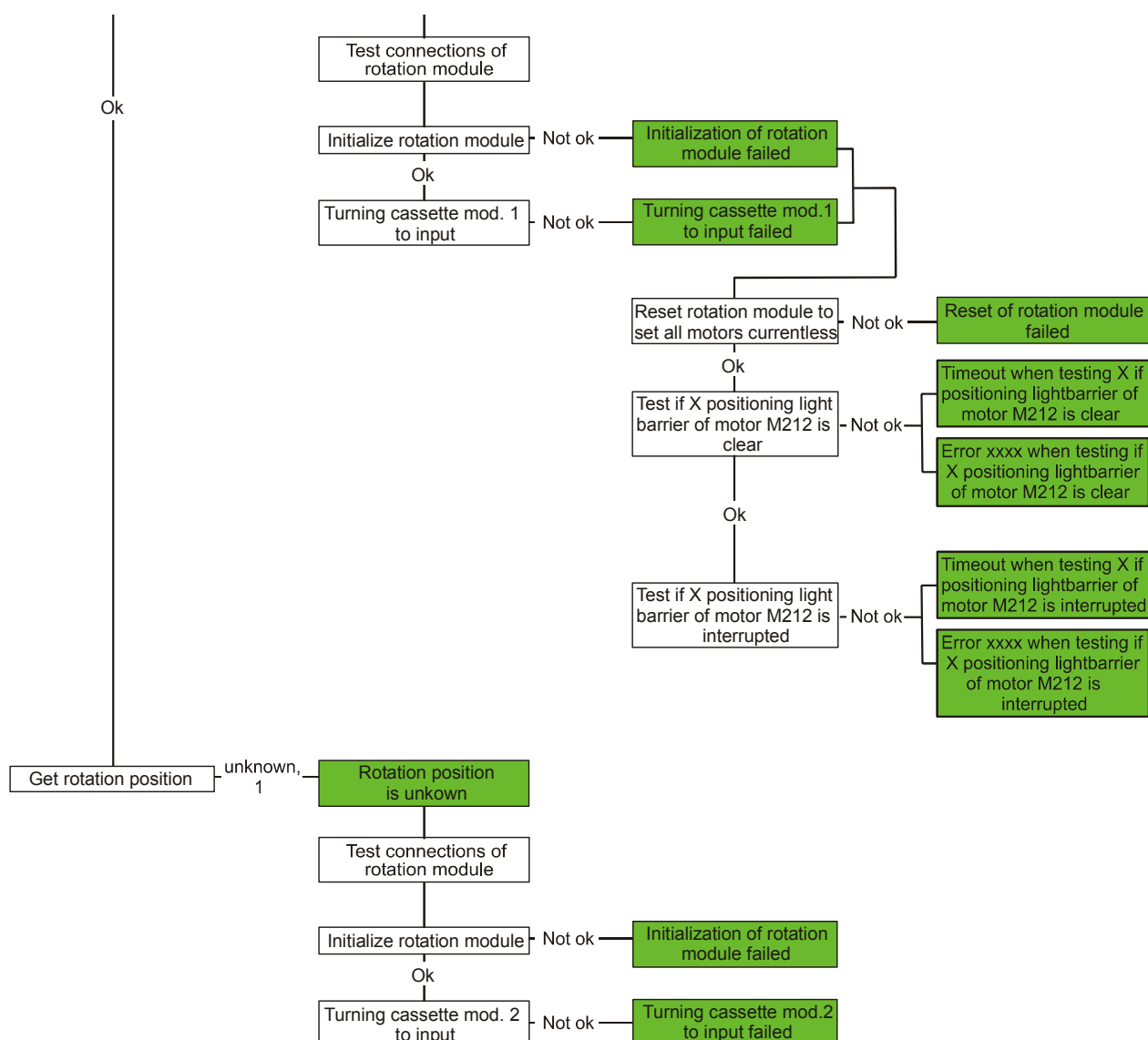
```

7 DIAGNOSTICS
  2 Mechanical Modules
    4 Rotation Unit
  
```





continues Rotation Unit – Checkpoint 3



1.4

Prescan Transport Unit - Checkpoint 4

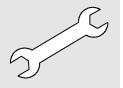
Run Diagnostic Software:

7 DIAGNOSTICS

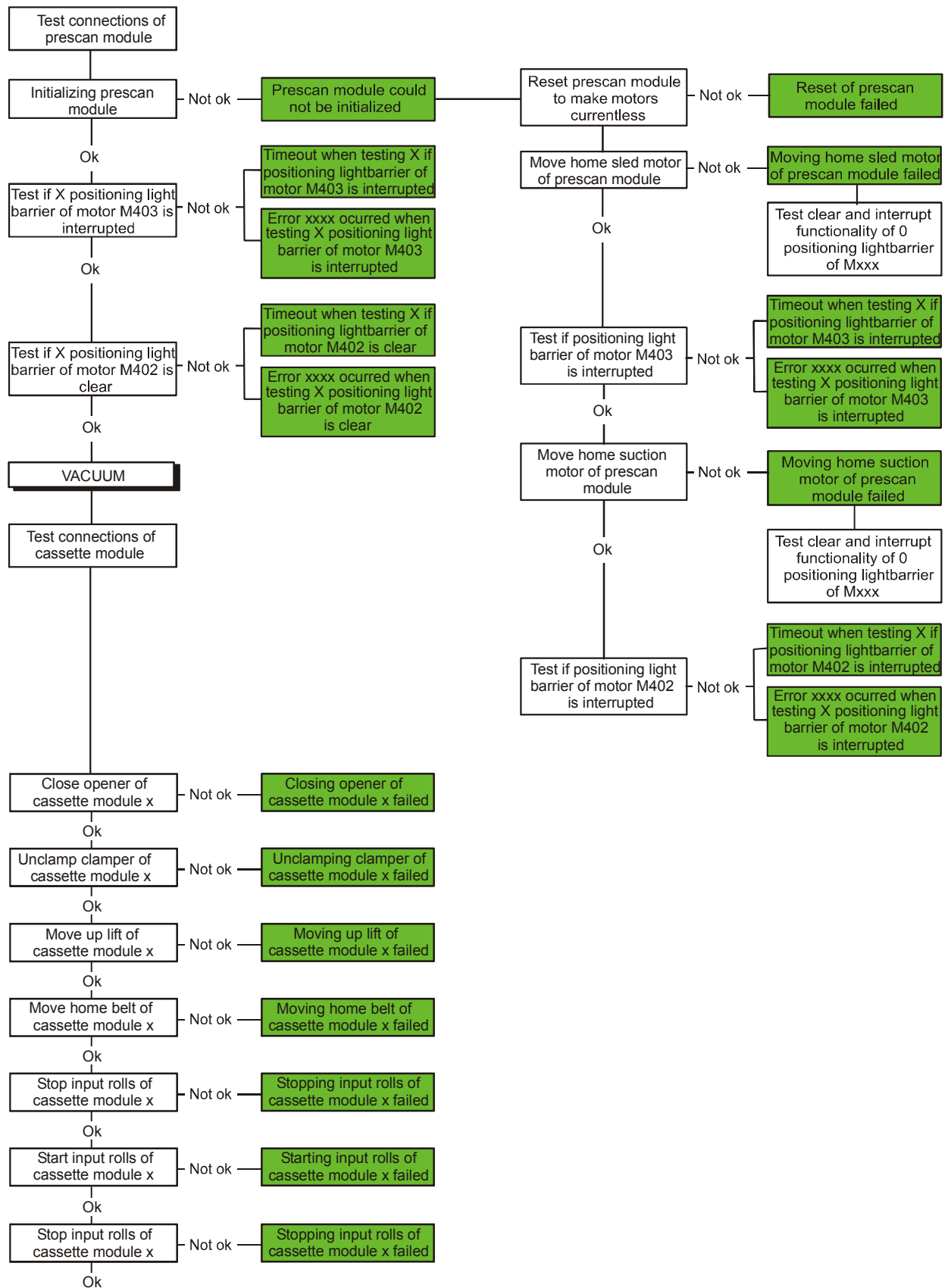
2 Mechanical Modules

5 Prescan transport + vac.

The abbreviation ROTCON is a subprogram and is also checked during diagnose. VACUUM and AIRDET are shown after the main program.



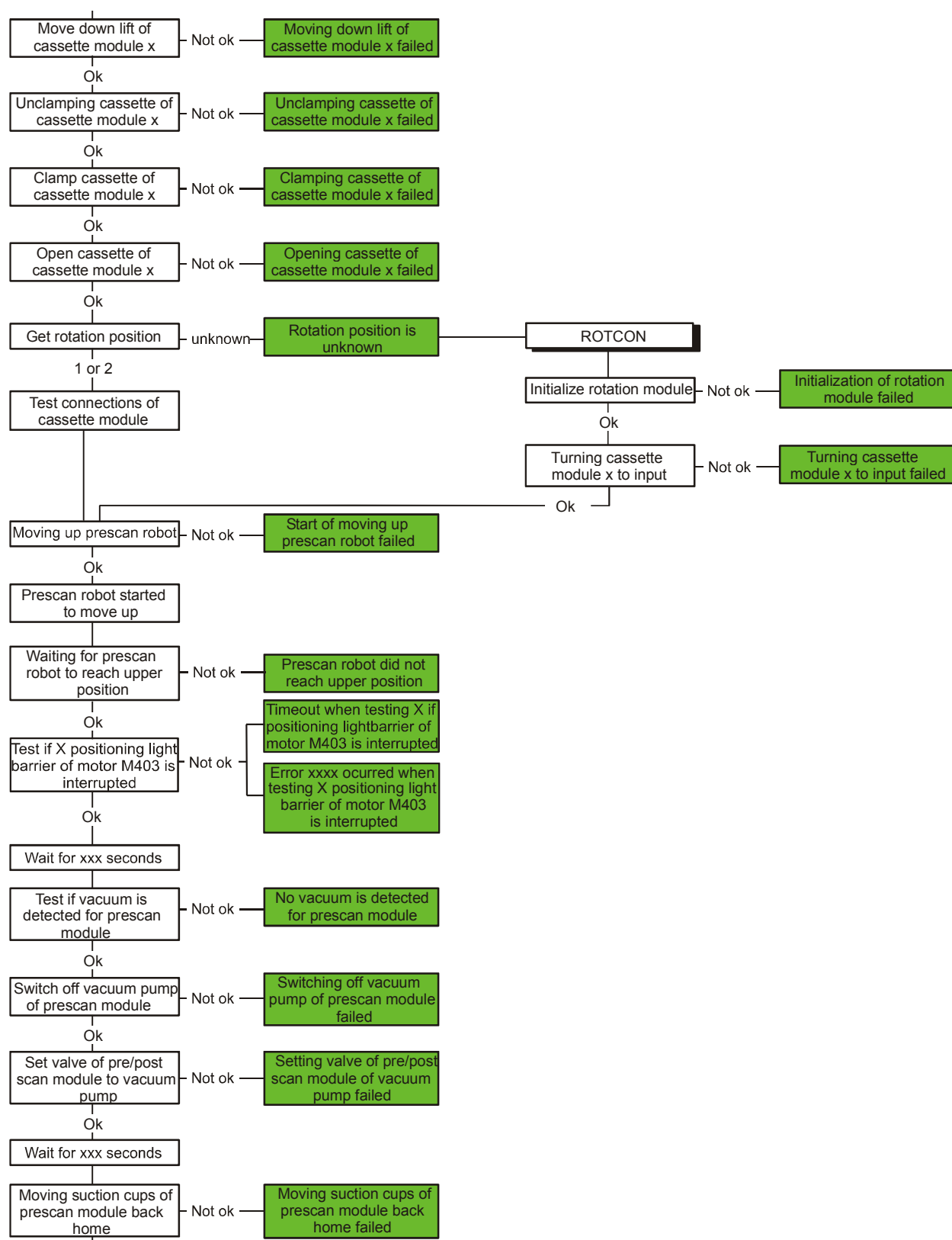
## continues Prescan Transport Unit – Checkpoint 4

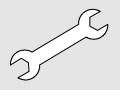




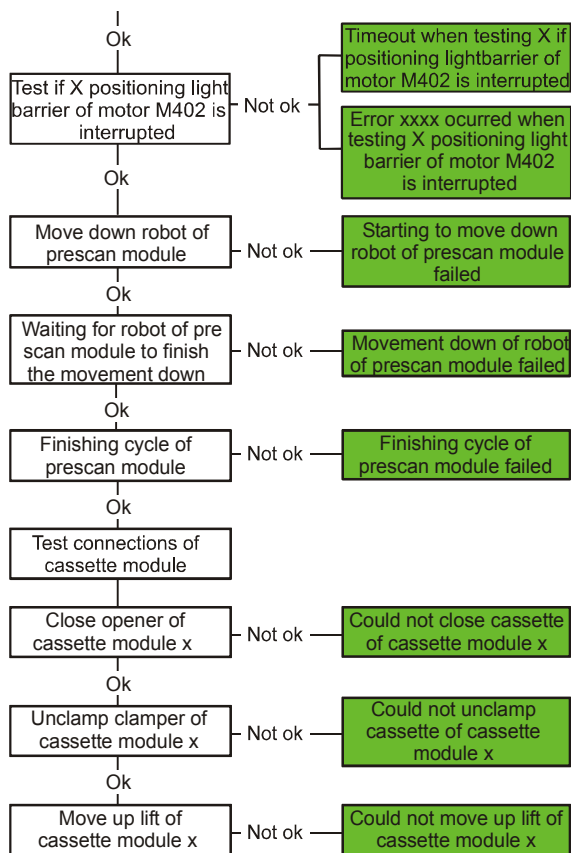


## continues Prescan Transport Unit – Checkpoint 4

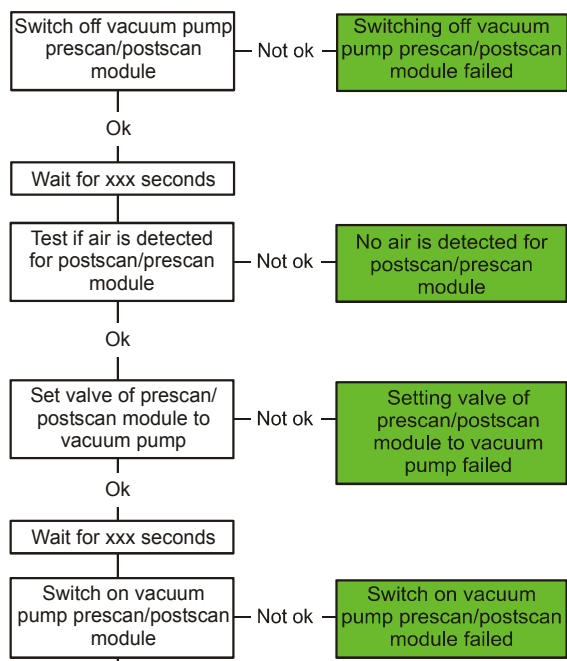




## continues Prescan Transport Unit – Checkpoint 4

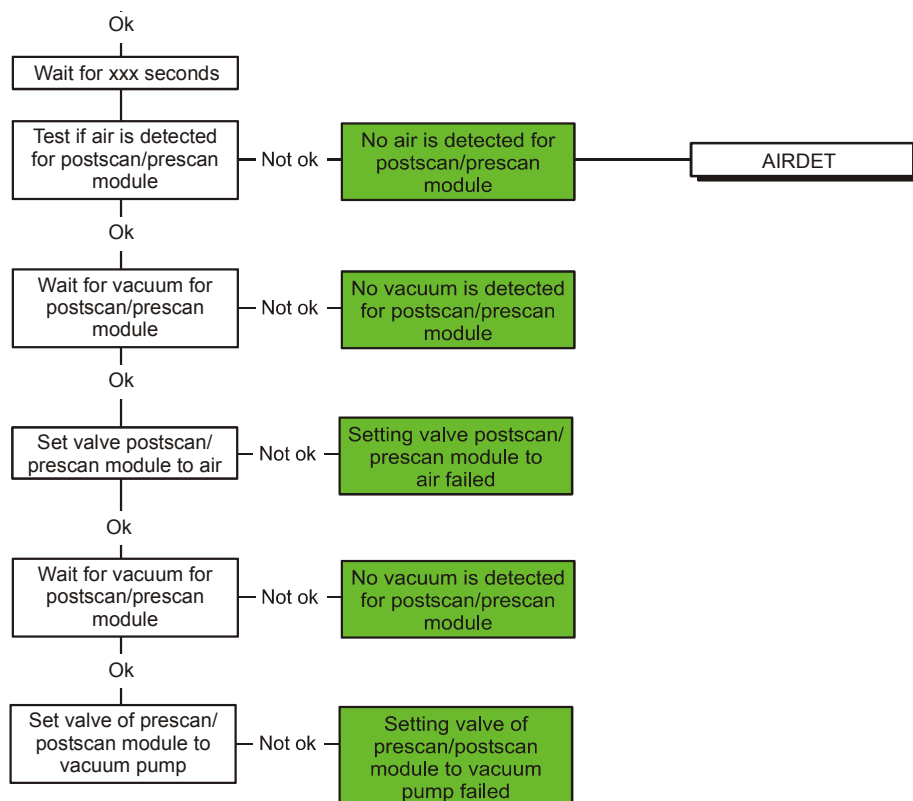


## Subprogram VACUUM:

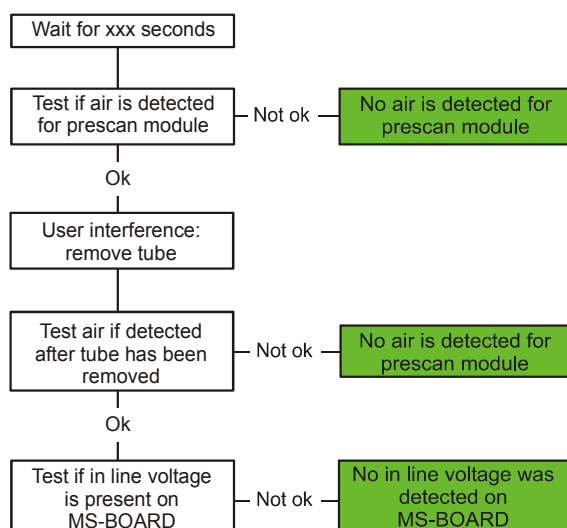


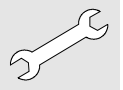


continues Prescan Transport Unit – Checkpoint 4



Sub subprogram AIRDET:

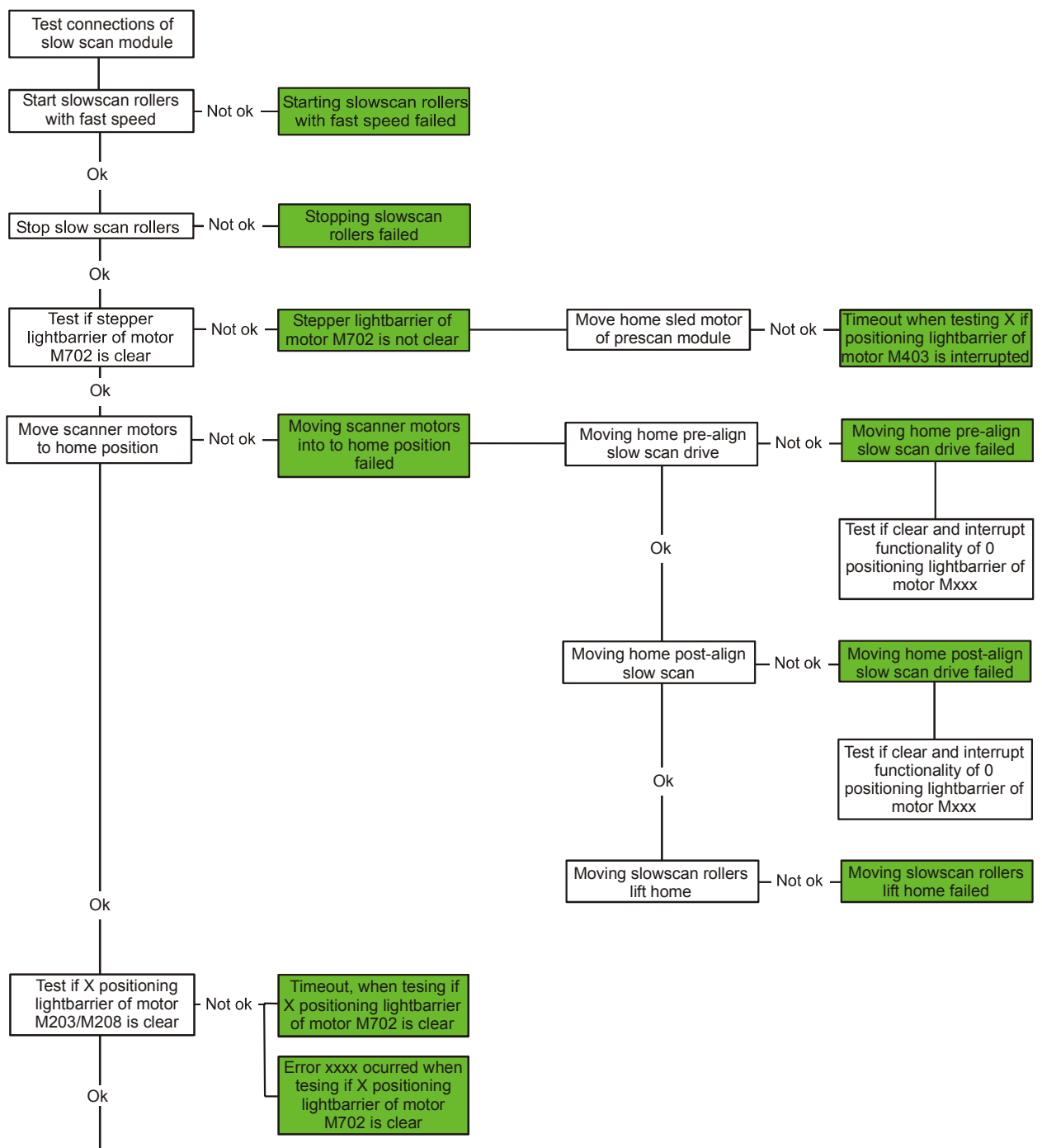




## 1.5 Scanner - Checkpoint 5

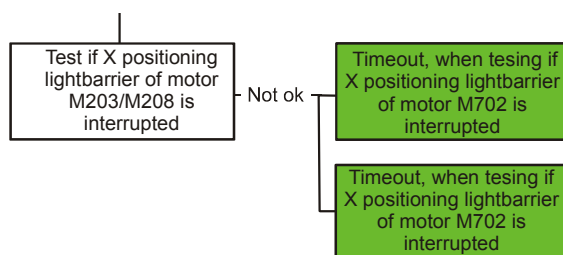
Run Diagnostic Software:

7 DIAGNOSTICS  
2 Mechanical Modules  
6 Scanner





continues Scanner – Checkpoint 5

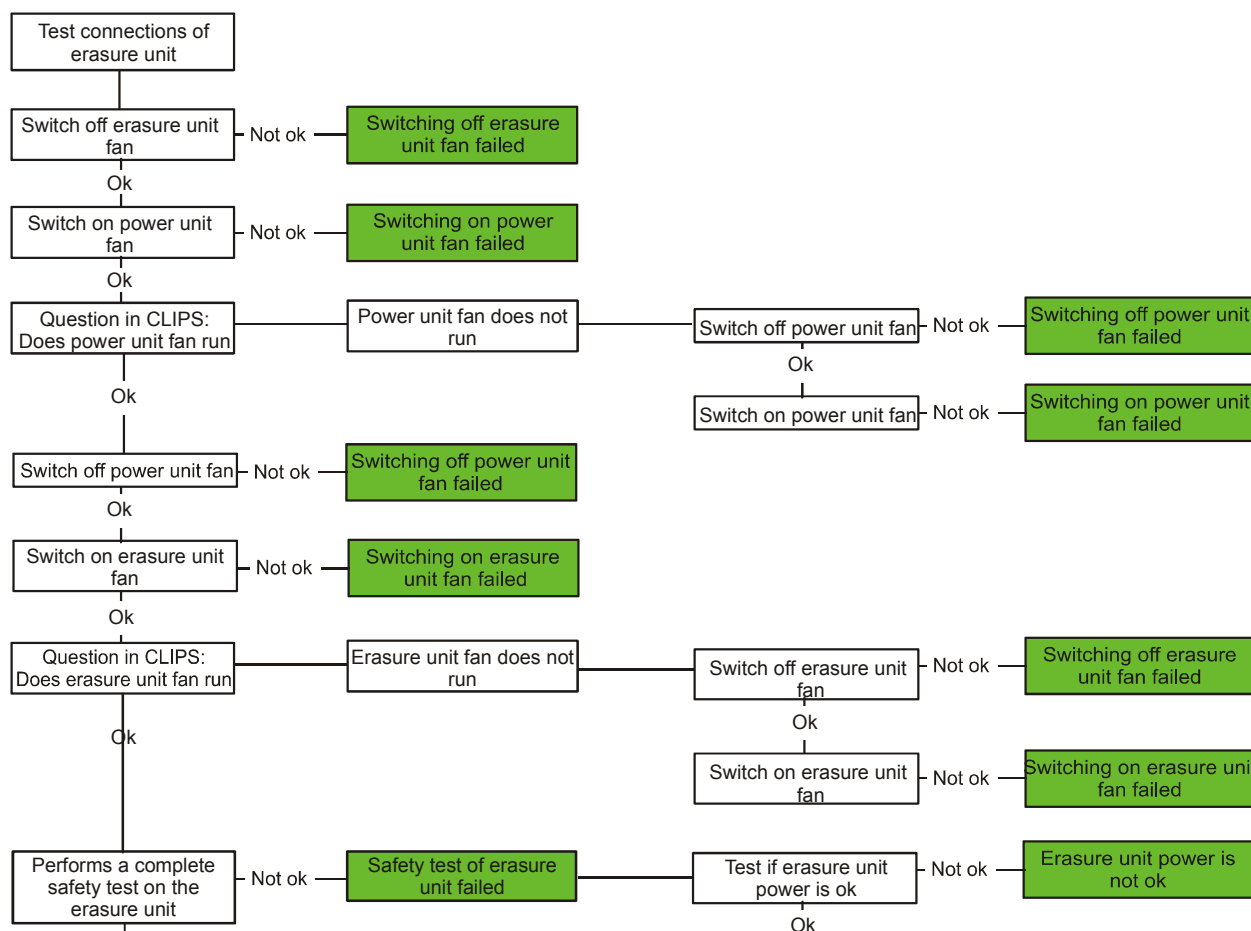


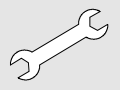
## 1.6 Erasure Unit - Checkpoint 6

Run Diagnostic Software:

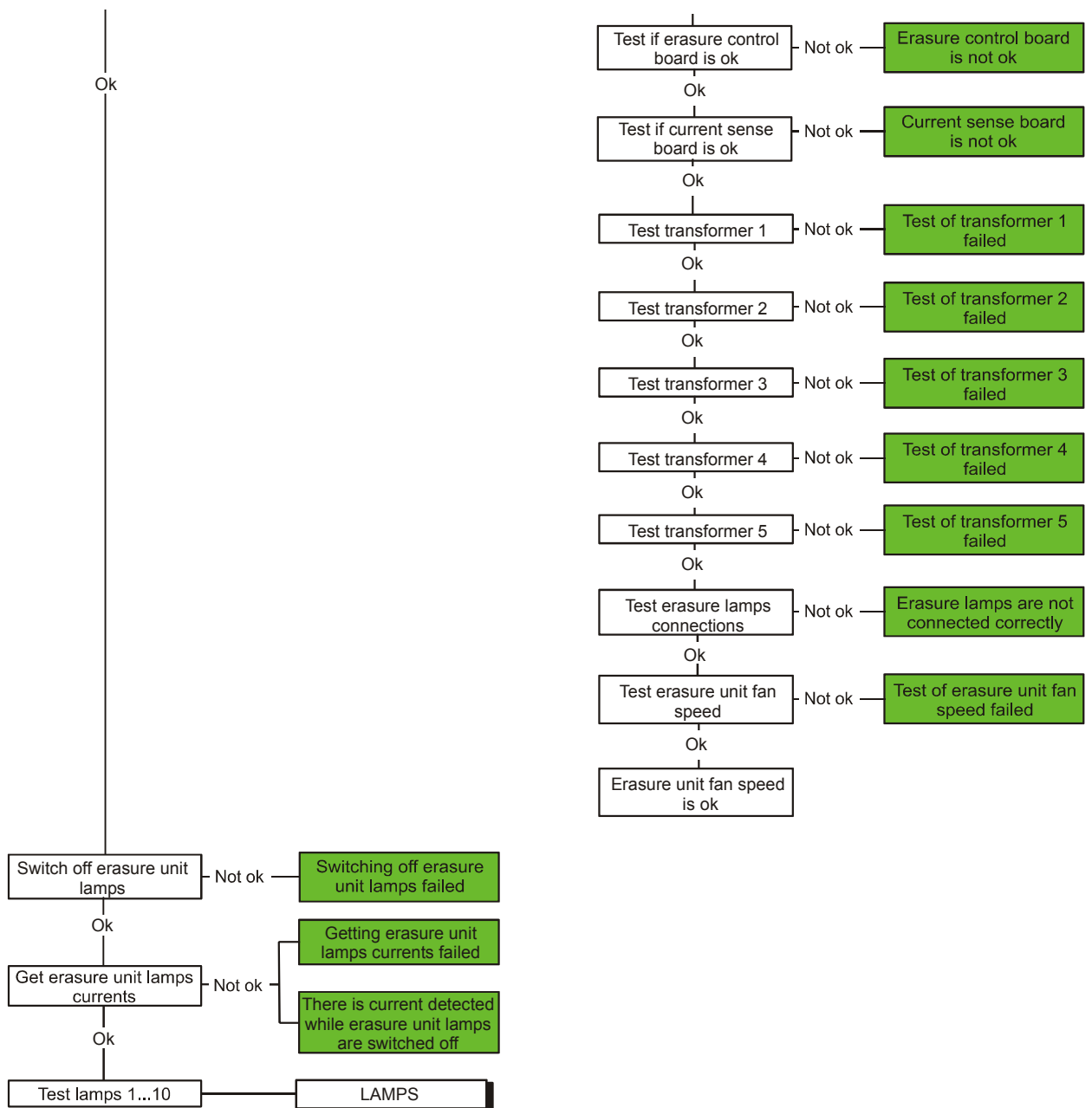
7 DIAGNOSTICS  
3 Erasure Unit

The subprogram LAMPS is shown after the main program.





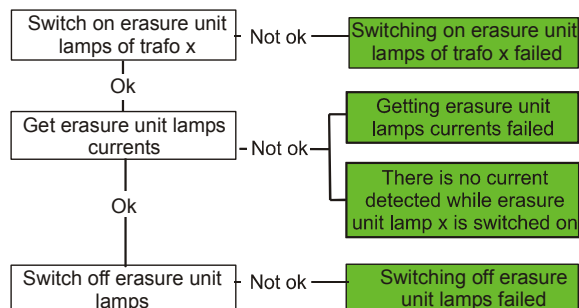
continues Erasure Unit – Checkpoint 6





continues Erasure Unit – Checkpoint 6

Subprogram LAMPS :



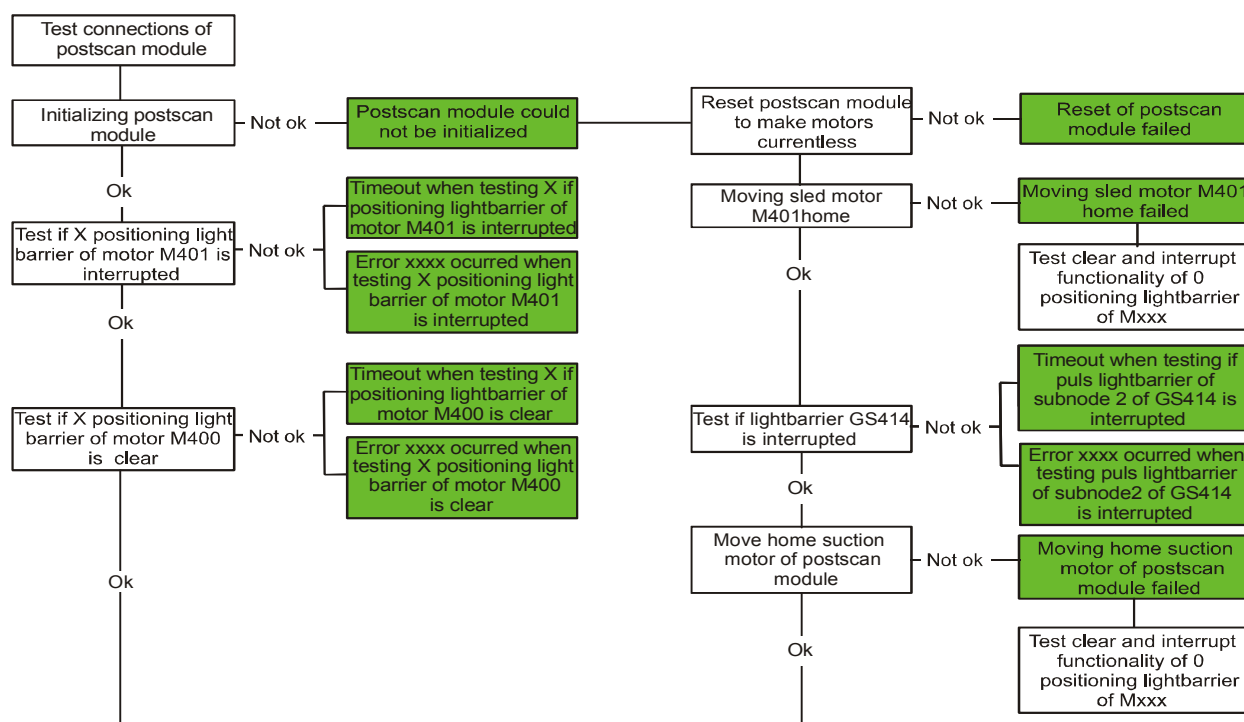
## 1.7

### Postscan Transport Unit - Checkpoint 7

Run Diagnostic Software:

7 DIAGNOSTICS  
2 Mechanical Modules  
7 Postscan transport

The subprogram VACUUM is shown at Checkpoint 4.



```

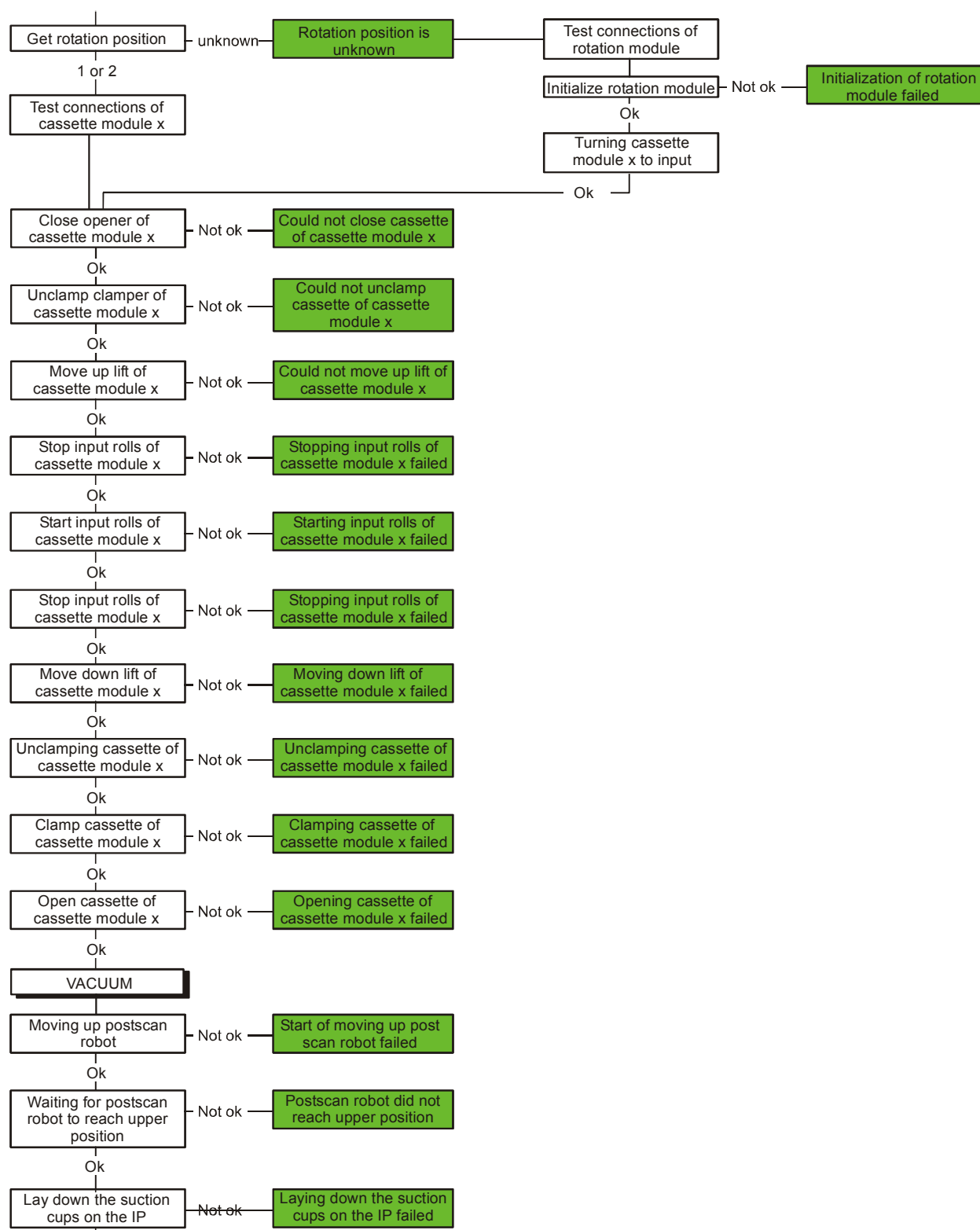
graph TD
    Start(( )) --> GetPos[Get rotation position]
    GetPos -- 1 or 2 --> TestCass1[Test connections of cassette module x]
    GetPos -- unknown --> RotUnknown[Rotation position is unknown]
    RotUnknown --> TestRot[Test connections of rotation module]
    TestRot --> InitRot[Initialize rotation module]
    InitRot -- Not ok --> InitRotFail[Initialization of rotation module failed]
    InitRot -- Ok --> TurnCass[Turning cassette module x to input]
    TurnCass -- Not ok --> TurnCassFail[Turning cassette module x to input failed]
    TurnCass -- Ok --> TestRot2[Test connections of rotation module]
    TestCass1 --> TestRot2
    TestRot2 --> TestCass2[Test connections of cassette module x]
    TestCass2 --> CloseOpener[Close opener of cassette module x]
    CloseOpener -- Not ok --> CloseOpenerFail[Closing opener of cassette module x failed]
    CloseOpener -- Ok --> Unclamp[Unclamp clamber of cassette module x]
    Unclamp -- Not ok --> UnclampFail[Unclamping clamber of cassette module x failed]
    Unclamp -- Ok --> MoveUp[Move up lift of cassette module x]
    MoveUp -- Not ok --> MoveUpFail[Moving up lift of cassette module x failed]
    MoveUp -- Ok --> MoveHome[Move home belt of cassette module x]
    MoveHome -- Not ok --> MoveHomeFail[Moving home belt of cassette module x failed]
    MoveHome -- Ok --> StopInput1[Stop input rolls of cassette module x]
    StopInput1 -- Not ok --> StopInput1Fail[Stopping input rolls of cassette module x failed]
    StopInput1 -- Ok --> StartInput1[Start input rolls of cassette module x]
    StartInput1 -- Not ok --> StartInput1Fail[Starting input rolls of cassette module x failed]
    StartInput1 -- Ok --> StopInput2[Stop input rolls of cassette module x]
    StopInput2 -- Not ok --> StopInput2Fail[Stopping input rolls of cassette module x failed]
    StopInput2 -- Ok --> MoveDown[Move down lift of cassette module x]
    MoveDown -- Not ok --> MoveDownFail[Moving down lift of cassette module x failed]
    MoveDown -- Ok --> OpenCass[Open cassette of cassette module x]
    OpenCass -- Not ok --> OpenCassFail[Opening cassette of cassette module x failed]
    OpenCass -- Ok --> End(( ))
  
```

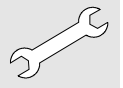
The flowchart details the initialization sequence for a cassette module. It begins with a 'Get rotation position' step. If the position is '1 or 2', it proceeds to 'Test connections of cassette module x'. If the position is 'unknown', it branches to 'Rotation position is unknown', which leads to 'Test connections of rotation module'. This step can fail, leading to 'Initialization of rotation module failed', or succeed, leading to 'Initialize rotation module'. 'Initialize rotation module' can fail, leading to 'Initialization of rotation module failed', or succeed, leading to 'Turning cassette module x to input'. 'Turning cassette module x to input' can fail, leading to 'Turning cassette module x to input failed', or succeed, leading to 'Test connections of rotation module'. From 'Test connections of rotation module', the process continues through a series of steps: 'Test connections of cassette module x', 'Close opener of cassette module x', 'Unclamp clamber of cassette module x', 'Move up lift of cassette module x', 'Move home belt of cassette module x', 'Stop input rolls of cassette module x', 'Start input rolls of cassette module x', 'Stop input rolls of cassette module x', 'Move down lift of cassette module x', and finally 'Open cassette of cassette module x'. Each of these steps has a 'Not ok' path leading to a corresponding failure message (e.g., 'Closing opener of cassette module x failed') and an 'Ok' path leading to the next step. The process ends with an 'Ok' path from the final 'Open cassette' step.



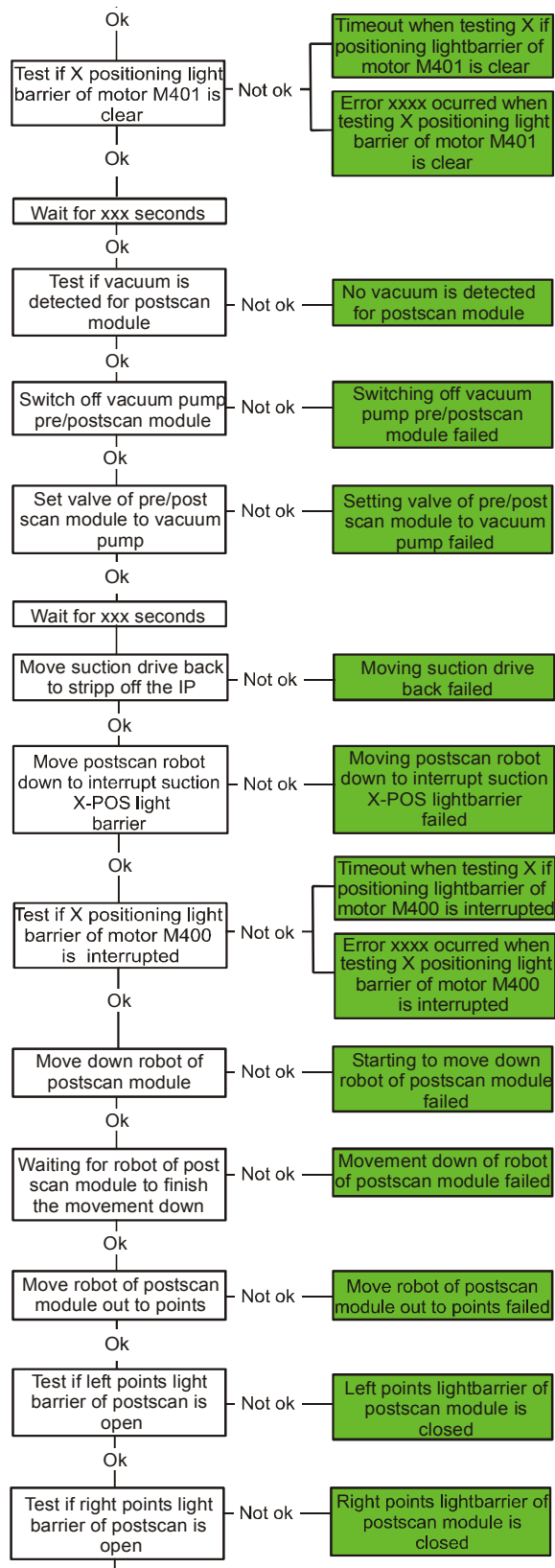


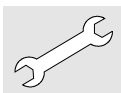
continues Postscan Transport Unit – Checkpoint 7





## continues Postscan Transport Unit – Checkpoint 7





## continues Postscan Transport Unit – Checkpoint 7

